

Perception of health-care workers in providing health care in the emergency department green zone at Hospital Tengku Ampuan Rahimah, Klang

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Introduction

Emergency department (ED) offers urgent medical care for a variety of diseases and injuries, some of which may be life-threatening and demand quick attention.

The ED is frequently mentioned as the most congested department, which causes an overload burden on healthcare workers (HCWs) worldwide.

Generally, ED is considered the gateway to the hospital, since it offers immediate care to patients.

In Malaysia, government hospitals must provide pre-hospital services and hospital-based services for the community which includes triage service (Emergency Medicine and Trauma Services Policy Malaysia, 2012).

Patients will triage into red, yellow and green zones according to priority of treatment. Red zone is known as critical zone, yellow zone as semi-critical zone and green zone as non-critical zone.

Over the past few years, post COVID-19 pandemic, there have been a steady upward trend in the total ED utilization in Selangor State; utilization of the green zone was considered the highest (Ministry of Health Malaysia, 2023).

High ED utilization is a worrying fact and could explain the current condition in ED such as overcrowding (Cunningham, 2011) and longer patient waiting time (Butun et al., 2022).

Objective

To explore the health-care workers' (HCWs) perception related to overcrowding and long waiting hours to get treatment in the ED green zone HTAR.

Methodology

STUDY DESIGN & DATA COLLECTION METHOD	Qualitative study of content analysis Semi structured face-to-face in-depth interviews (IDI)
SAMPLING TECHNIQUE	Purposive Sampling
TARGET POPULATION	11 HCWs from HTAR from various designations from ED to include a range of health care providing experiences
STUDY INSTRUMENT	Semi-structured questionnaire
ETHICAL APPROVAL	Medical Research Ethics Approval (MREC) NMRR ID-23-00535-JYG

Results

THEME 1:

Insufficient knowledge among public

Lack of knowledge about functions of ED and the zones available
Some of the public not aware of the cases should be treated in the ED
Lack of knowledge about facilities available at nearby Klinik Kesihatan

"Ada patient yang aware dengan fungsi ED tapi ramai untuk ignore." (Community nurse)

"Fungsi ED sering dijelaskan kepada patient tetapi mereka masih tidak faham" (Assistant Medical officer)

"Doktor only merujukkan pesakit untuk pergi ke klinik jika kesakitan tidak memerlukan rawatan segera seperti demam, batuk dll, namun tidak berapa diendahkan." (Community nurse)

"Lack of awareness among patient regarding services provided in Klinik Kesihatan and Klinik Kesihatan led to more patient seeking medical attention at the hospital." (Specialist)

"Sometimes patient did not know why they were referred to the hospital, and there's time where some cases that were not urgent were referred to HTAR." (Specialist)

THEME 2:

'One-stop centre'

Green zone ED often referred as 'one-stop centre' due to the comprehensive treatment provided which includes screening, blood testing and specialist availabilities.

Having a greater trust in the ED services and staff because of the availability of resources and staff expertise

Preferred to use ED instead of going to private clinics or Klinik Kesihatan (KK) due to the perception that ED staff possessed more skills compared to a perceived lack of skills among KK HCWs and general practitioners (GPs).

Availability of more resources in ED settings compared to KK or private clinics

Visiting the ED is more convenient and comfortable than using other healthcare services

"Lack of awareness among patient regarding services provided in Klinik Kesihatan and Klinik Kesihatan led to more patient seeking medical attention at the hospital." (Specialist)

"Untuk dapatkan rawatan sepenuhnya termasuk ujian darah, x-ray, FCG dan sebagainya, patient shortcut ke ED untuk mendapatkan segala rawatan." (Specialist)

"Patient rasa ubat hospital lebih bagus daripada ubat di KK, sebab bilik rawat padahal ubat sama je." (Specialist)

"Green Zone lebih OPD macam one-stop centre, ini adalah previous culture in ED." (Assistant Medical officer)

"Bila dapat keputusan Imaging dengan cepat berbanding dengan KK." (Specialist)

"Walaupun tidak semua atau doktor, doctor di ED lebih merujuk pesakit di ED, maka mereka lebih setia ke ED." (Medical officer)

THEME 3:

Lack of staff in all profession categories

The number of staffs present at ED green zone is not enough to cover the overall work load.

"Most of the time only 1 or 2 MA will cover green zone and just 1 MA withdrawing blood which delay the process. The priority is definitely given to red and yellow zone. So the waiting hours at green zone also will be longer." (Medical Officer)

"Kami hanya dua MO sahaja bertugas dalam 1 shift. So masa pemeriksaan itu tidak tentu bergantung kepada keadaan yang dihadapi oleh jaga malam atau umur pesakit atau bahasa sebab kadang-kadang nak bagi patient faham pun akan ambil masa yang lama sebab tak faham bahasa. Lepas settle dengan baru boleh panggil yang next so masa menunggu pun lama sebab tak cukup staff." (Medical Officer)

"Recent reduction of staff mentally drained them as the workload increase. The work delegation is bad where after pandemic, the teamwork among staff depleted until they become more selfish. They just want to quickly finish their work and go home. Most of our staffs were also mentally drained, burnt out, break down and want to spend more time with their family as sometimes their shift were extended." (Specialist)

THEME 4:

Further investigation takes time

Post-pandemic, most patients either missed or skipped their general appointments, which led to serious health complications. The screening and treatment of these patients at the ED green zone will be longer than usual hours.

Present with more than two health conditions are considered as 'complex diseases', which may take longer hours of investigation. Furthermore, certain complex diseases must be evaluated by a specialist, and this will take longer than usual.

Certain blood test results or imaging results take a long time.

"Masuk jumpai sampai dapat dan prosedur di makmal akan mengambil masa lama jika sebab pihak akan kumpul semua secara privat kerana mereka ke lab. Mereka akan gunakan satu makmal dulu." (Community nurse)

"When patient never comply with the medication they will end up in ED as chronic cases with chronic wounds, diabetes, hypertension which will require us to do further investigations to rule out certain complications and this will take longer hours as well." (Medical officer)

"Tidak ada punca untuk hantar darah ke lab, maka proses blood test untuk rawatan yang lama. Di lab pun kadang-kadang akan lambat sebab mereka akan ambil sampel." (Medical officer)

THEME 5:

Management issues

Human resources: Lack of staff in other departments which are interdependent in the process of treating patients in the ED

Work culture: There is a lack of cooperation between departments.

Work process: For non-emergency cases, referrals from KK or private clinics are usually directed to the ED and not to the respective departments

Facilities: ED lacks the necessary facilities and equipment, and if equipment malfunctions, there is no backup equipment available

System problems: Due to the manual clerking system, if there is a system down in the lab, ED will be used as a reference point to make an initial investigation if other departments lose the patient's records.

"Pesakit yang ramai di ED menyebabkan workload tinggi, pesakit terpaksa menunggu lebih lama sebenarnya mereka boleh pergi langsung ke department staff ED Green zone di Sultan Ismail pun." (Community nurse)

"Bantuan teknikal tidak memadai dan since after pandemic, the manpower the MO and paramedics are decreased to about half. It requires more MO. The waiting in factory where machine especially vital sign monitoring breakdown early and require a lot of time to be repaired. Especially ECG machine." (Specialist)

"Ada beberapa hal seperti bekutangan staff. Staff yang ada sekarang ini kurang daripada perawatannya yang sedia ada. Masalah mesin. Contohnya kalau mesin rusak, rasa ada back up mesin dan juga budaya kerja. Dalam jabatan baik tetapi bila melibatkan jabatan lain kadang-kadang timbul masalah komunikasi." (Specialist)

"Masih cepat nak ke lab kerana menggunakan 24 jam setiap hari. Jika rusak, repairing proses juga lambat masa yang lama." (Assistant Medical officer)

"Zon hijau ED ni tak cukup doktor. Serentak proses untuk dapatkan rawatan bagi pesakit lebih senang jadi mangkuk, plaster, pengikat, disahkan, prosedur untuk berurusan patient dimana maklumat telah dibuat kepada management namun tidak perubahan yang boleh dibuat." (Community nurse)

"Ada laporan datang pesakit boleh dapatkan rawatan segera, tetapi akan lambat kerana banyak JM kerana workload dan bertambah sebab masa pandemik. JM akan dibuat dan juga ada ada banyak 2 orang." (Community nurse)

"Kesetiaan yang kurang antara MO juga adalah satu hal dimana mereka tidak mahu membantu antara satu sama lain." (Community nurse)

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Conclusion

Perceptions of HCWs indicate that ED overcrowding is a complex issue that requires a system-based action plan.

Based on the findings, it can be concluded that it is crucial to empower public knowledge on function of ED, increase efforts to provide good working environment as well as address adequate staffing, facilities, and create pathway for collaboration with private clinics/hospitals to reduce treatment costs for non-urgent cases.

Recommendation

The following recommendation were suggested by the HCWs to address issues related to overcrowding and long waiting hours to get treatment in the ED green zone HTAR:

- Enhance the comprehensive services at Klinik Kesihatan (KK) and intensify the promotion of the facilities available there
- The efficiency of the triage counters at KK needs to be improved
- Increase number of staff and equipment in the ED
- The general public should be educated on the functions of ED and the diseases that should be treated at ED
- MOH should collaborate with private clinics and hospitals so that patients can be treated for non-urgent cases over there

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